Title: METHOD FOR REDUCING DC OFFSET ERROR FOR SINGLE ENDED AND DIFFERENTIAL SIGNALS

Assignee: Intel Corporation

IN THE CLAIMS

Please amend the claims as follows:

- 1. (Original) An article comprising:
- a first peak detector to generate an output in response to detection of a peak amplitude of a received signal at an input terminal;
- a first amplifier to compare the peak amplitude and a first reference potential and generate a feedback signal coupled through a resistance to the input terminal; and a second amplifier to compare the received signal and a second reference potential.
- 2. (Currently Amended) The article of claim 1 further including a maximum level detector and a minimum level detector, each having an output coupled by a voltage divider to provide the [[first]] second reference potential.
- 3. (Original) The article of claim 1 further including a capacitor coupled to the input terminal to provide isolation.
- 4. (Original) The article of claim 1 wherein the first peak detector includes a maximum high level peak detector.
- 5. (Original) The article of claim 1 wherein the first peak detector includes a minimum low level peak detector.
- 6. (Original) The article of claim 1 wherein the resistance includes a transistor.
- 7. (Original) The article of claim 1 further including a filter coupled to the first amplifier.
- 8. (Original) A circuit comprising:
- a feedback amplifier having a feedback output and a first feedback input and having a second feedback input to couple with a first reference potential;

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a peak detector having a detector output coupled to the first feedback input and having a detector input;

- a feedback circuit coupled to the feedback output and coupled to the detector input; and a receiver amplifier having a first receiver input coupled to the detector input and having a second receiver input adapted to couple with a second reference potential.
- 9. (Original) The circuit of claim 8 wherein the feedback circuit includes a resistor.
- 10. (Original) The circuit of claim 8 wherein the feedback circuit includes a transistor.
- 11. (Original) The circuit of claim 8 further including a filter coupled between the first feedback input and the feedback output.
- 12. (Original) A system comprising:
 - a driver having a primary output terminal;
 - a receiver having a primary input terminal coupled to the primary output terminal;
- a primary peak detector coupled to the primary input terminal and having a primary peak output;

an output amplifier having a first amplifier input coupled to the primary input terminal and a second amplifier input coupled to a first reference potential;

a primary feedback amplifier having a first primary feedback input coupled to the primary peak output and a second primary feedback input coupled to a second reference potential and having a primary feedback output; and

a primary feedback circuit coupled to the primary feedback output and coupled to the primary input terminal.

13. (Original) The system of claim 12 further including a capacitor between the primary output terminal and the primary input terminal.

- 14. (Original) The system of claim 12 further including a primary filter coupled between the first primary feedback input and the primary feedback output.
- 15. (Original) The system of claim 14 wherein the primary filter includes a capacitor.
- 16. (Original) The system of claim 12 wherein the primary feedback circuit includes a resistor.
- 17. (Original) The system of claim 12 wherein the primary feedback circuit includes a transistor.
- 18. (Original) The system of claim 12 wherein the primary input terminal is coupled to the primary output terminal by a cable.
- 19. (Original) The system of claim 12 wherein the primary input terminal is coupled to the primary external output terminal by a backplane.
- 20. (Original) The system of claim 12 wherein the driver includes a secondary output terminal and the receiver includes a secondary input terminal coupled to the secondary output terminal and further including:

a secondary peak detector coupled to the secondary input terminal and having a secondary peak output;

a secondary feedback amplifier having a first secondary feedback input coupled to the secondary peak output and a second secondary feedback input coupled to the primary peak output and having a secondary feedback output; and

a secondary feedback circuit coupled to the secondary feedback output and coupled to the secondary input terminal; and

wherein the second amplifier input is coupled to the secondary input terminal.

21. (Original) A method comprising:

detecting a peak amplitude of an input signal;

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generating a feedback signal as a function of a comparison of the peak amplitude and a first reference potential;

biasing the input signal with the feedback signal; and

generating an output signal as a function of a comparison of the input signal and a second reference potential.

- 22. (Original) The method of claim 21 wherein detecting the peak includes detecting a peak high value.
- 23. (Original) The method of claim 21 wherein generating the feedback signal includes generating an amplified signal based on a differential between the peak and the first reference level.
- 24. (Original) The method of claim 21 wherein detecting the peak in the input signal includes receiving the input signal from a signal source and further including receiving the second reference potential from the signal source.
- 25. (Original) The method of claim 21 further including generating the second reference potential by averaging a maximum high value of the input signal and a minimum low value of the input signal.
- 26. (Original) A method comprising:

receiving a first reference potential;

sampling an input signal relative to the first reference potential;

generating a correction signal based on a peak amplitude in the sampled input signal; and biasing the input signal as a function of the correction signal.

27. (Original) The method of claim 26 wherein receiving the first reference potential includes generating the first reference potential as a function of a maximum high value of the input signal and a minimum low value of the input signal.

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28. (Original) The method of claim 26 wherein generating the correction signal based on the peak amplitude in the sampled input signal includes detecting the maximum high value in the sampled input signal.

29. (Original) The method of claim 26 wherein biasing includes generating a differential amplified signal based on a comparison of the peak amplitude and a second reference potential.

30. - 32. (Withdrawn)

33. (Original) A system comprising:

a reduced instruction set computer having an output terminal;

a first peak detector having an input terminal coupled to the output terminal and to generate an output in response to detection of a peak amplitude of a received signal at the input terminal;

a first amplifier to compare the peak amplitude and a first reference potential and generate a feedback signal coupled through a resistance to the input terminal; and

a second amplifier to compare the received signal and a second reference potential.

34. (Original) The system of claim 33 wherein the reduced instruction set computer provides an output signal having an unbalanced duty cycle.

35. (Original) The system of claim 33 wherein the reduced instruction set computer provides a single ended signal.